

REMARKS

Claims 8-17 and 19-31 are pending in the application. Reconsideration of the pending claims is respectfully requested based on the following remarks.

I. REJECTION OF CLAIMS 8, 11, 16-17, AND 19 UNDER 35 U.S.C. § 103

Claims 8, 11, 16-17, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,099,276 (Kalkunte) in view of U.S. Patent Publication No. 2002/0071398 (Moran) and further in view of U.S. Patent No. 5,233,603 (Takeuchi). Withdrawal of the rejection is respectfully requested for at least the following reasons.

- i. Kalkunte and the other cited art fail to teach an ingress/egress port that operates as a single GE port in a first mode of operation, as recited in claim 8 and 17.*

Claim 8 recites an ingress/egress port for an Ethernet switch having a plurality of Media Access Control (MAC) interfaces, each MAC interface configured for receiving/transmitting Fast Ethernet (FE) packets, and at least one of the MAC interfaces further being configured to receive/transmit Gigabit Ethernet (GE) packets independent of the other plurality of MAC interfaces. ***During a first mode of operation, the ingress/egress port operates as a single GE port.*** A similar limitation is recited in claim 17.

The Office Action alleges that Kalkunte teaches an “ingress/egress port (SOC; see Fig. 20) [that] operates as a single GE port in the first mode of operation ... (figure 20 shows that when trunking is used, there is a single GE port for ingress/egress communications; see figure 20)...” Office Action of 9/30/2010, p 3, numeral 4. However, as will be more fully appreciated below, Kalkunte fails to expressly or inherently teach an ***ingress/egress port that operates as a single GE port in a first mode of operation***, and one of ordinary skill in the art would not modify Kalkunte to arrive at the invention of claims 8 and 17, absent impermissible hindsight.

More particularly, Fig. 20 of Kalkunte teaches two switches-on-chip (SOC) 10 interconnected to provide a solution with forty ports and two gigabit ports as an uplink. Col. 34, lines 57-60. Kalkunte states, "The interconnection shown in FIG. 20 is a trunk group which could include 4 high speed links, such as Fast Ethernet links, cooperatively operating in a trunk group with a higher speed link, such as a Gigabit link." Although Kalkunte mentions "a higher speed **link**, such as a Gigabit link" (*in the singular*), it will be appreciated that because a Gigabit **link** as taught in Kalkunte is not the same as a single **GE port** as recited in claims 8 and 17, this passage fails to meet this limitation of claims 8 and 17.

A person of ordinary skill in the art appreciates that a "port" serves as an interface between a computing device and at least one other computing device or peripheral device. Wikipedia mentions that, "[p]hysically, a port is a typically specialized outlet on a piece of equipment to which a plug or cable connects".

[http://en.wikipedia.org/wiki/Computer_port_\(hardware\)](http://en.wikipedia.org/wiki/Computer_port_(hardware)) (last accessed Nov. 29, 2010).

This is consistent with the use of the term "port" as recited in the present application.

See e.g., para. [0014] of the specification as originally filed. In contrast, a link as recited in Kalkunte is the connection over which two or more ports communicate. In view of this distinction between links and ports, Kalkunte describes an example where a trunk group consists of 8 Fast Ethernet ports linked together cooperatively with one Gigabit link, such that the total solution consists of 32 Fast Ethernet ports and two **Gigabit ports** with an interconnection bandwidth of 1.8 Gbps in full duplex mode. Kalkunte, col. 35, lines 11-16.

Hence, although Kalkunte describes communication that uses a Gigabit **link** (*in the singular*), Kalkunte fails to disclose an ingress/egress port that operates as a **single GE port** in a first mode of operation, as recited in claims 8 and 17. The other cited art also fails to disclose this feature.

- ii. ***One of ordinary skill in the art would not be motivated to alter the teachings of Kalkunte, which teaches using two Gigabit ports, to utilize an ingress/egress port that operates as a single GE port in a first mode of operation as recited in claims 8 and 17, because Kalkunte teaches away from such a modification.***

In describing how the two SOC's 10 in FIG. 20 operate, Kalkunte describes an example wherein poorly chosen numbers of Fast Ethernet links and Gigabit links leads to an unbalanced data transmission load, which is an undesirable condition. See generally, col. 34, line 57 – col. 35, line 19. To reduce the amount of “unbalance” between the Fast Ethernet links and Gigabit links, Kalkunte increases the number of Fast Ethernet ports “to increase the bandwidth of the combination of Fast Ethernet ports to a bandwidth that is compatible with the Gigabit port.” Col. 35, lines 3-8. Ultimately, Kalkunte arrives at a solution that consists of 32 Fast Ethernet ports and 2 Gigabit ports with an interconnection bandwidth of 1.8 Gbps in full duplex mode. In this example, the Gigabit port handles approximately 55% of the total transmission flow, which is a relatively “balanced” proportion of the transmission flow.

In view of Kalkunte's “balancing act” described above, one of ordinary skill would not be motivated to reduce the number of Gigabit ports from ***two*** GE ports (which provides a relatively good balance of 55% GE port flow to 45% FE port flow) to a ***single*** GE port (which may provide a balance of less than 30% GE port flow to more than 70% FE port flow). Thus, ***the proposed modification would cause the transmission flow to become significantly out of balance, in stark contrast to Kalkunte's purpose to keep balanced transmission flow.*** Because this is contrary to the purpose of Kalkunte, which strives to achieve transmission flow balance between Fast Ethernet ports and Gigabit ports, one of ordinary skill in the art would not be motivated to modify the teachings of Kalkunte to utilize an ingress/egress port that operates as a single GE port as recited in claims 8 and 17 (absent impermissible hindsight).

II. REJECTION OF CLAIMS 9-10 UNDER 35 U.S.C. § 103

Claims 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalkunte in view of Moran and Takeuchi and further in view of U.S. Patent Publication No. 2003/0212815 (Tzeng et al.). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Claims 9-10 depend upon claim 8 and add further limitations thereto. Because the primary references do not teach the present invention of claim 8, and because Tzeng et al. fail to remedy the deficiencies in the primary references, claims 9-10 are also non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

III. REJECTION OF CLAIMS 12 AND 20 UNDER 35 U.S.C. § 103

Claims 12 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalkunte in view of Moran and Takeuchi, and further in view of U.S. Patent No. 6,356,951 (Gentry). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Claim 12 depends upon claim 8 and adds further limitations thereto. Claim 20 depends upon claim 17 and adds further limitations thereto. Because the primary references do not teach the present invention of claims 8 and 17, and because Gentry fails to remedy the deficiencies in the primary references, claims 12 and 20 are also non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

IV. REJECTION OF CLAIMS 13-15 AND 21-23 UNDER 35 U.S.C. § 103

Claims 13-15 and 21-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kalkunte in view of Moran, Takeuchi, and Gentry, and further in view of U.S. Patent No. 6,226,292 (Di Placido). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Claims 13-15 depend upon claim 8 and add further limitations thereto. Claims 21-23 depend upon claim 17 and adds further limitations thereto. Because the primary references do not teach the present invention of claims 8 and 17, and because Gentry and Di Placido fail to remedy the deficiencies in the primary references, claims 13-15 and 21-23 are also non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

V. REJECTION OF CLAIMS 24-25 AND 28-29 UNDER 35 U.S.C. § 103

Claims 24-25 and 28-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,099,276 (Kalkunte) in view of U.S. Patent Publication No. 2002/0071398 (Moran). Withdrawal of the rejection is respectfully requested for at least the following reasons.

- i. One of ordinary skill in the art would not be motivated to alter the teachings of Kalkunte, which teaches using two Gigabit ports, to utilize an ingress/egress port that operates as a single GE port in a first mode of operation as recited in claims 24 and 28, because Kalkunte teaches away from such a modification.*

As argued above with respect to claims 8 and 17, the combination of cited art is improper because a person of ordinary skill in the art would not modify Kalkunte as proposed in the pending Office Action. Consequently, the pending claims are believed to be patentably distinguishable over the cited art.

VI. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, LANP129US.

Respectfully submitted,
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